PCT.

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: (11) International Publication Number: WO 99/47087 A61F 6/00, A61L 2/00, 27/00, 31/00, **A1** (43) International Publication Date: 23 September 1999 (23.09.99) C08F 34/00, 134/00 (21) International Application Number: PCT/US99/05773 (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, (22) International Filing Date: 17 March 1999 (17.03.99) GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, (30) Priority Data: SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, 60/078,388 18 March 1998 (18.03.98) ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, US UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, (71) Applicant (for all designated States except US): RISK MAN-ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI AGEMENT ASSOCIATES LTD. [US/US]; 62 Pointe Rok, patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, Worcester, MA 01604 (US). NE, SN, TD, TG). (72) Inventor; and (75) Inventor/Applicant (for US only): WEINERT, George, W. **Published** [US/US]; 62 Pointe Rok, Worcester, MA 01604 (US). With international search report. Agents: DEGRANDI, Joseph, A. et al.; Smith, Gambrell & Russell, LLP, The Beveridge, DeGrandi, Weilacher & m Young Intellectual Property Group, Suite 800, 1850 M Street, N.W., Washington, DC 20036 (US). Ē Ò u

(54) Title: PROCESS FOR REDUCING PROTEIN ALLERGENS IN LATEX PRODUCTS

(57) Abstract

Described is a process for reducing the antigenicity of sap and products made from the sap of the *Hevea brasilisensis* plant and other nubber plants. The process involves contacting sap or a latex rubber product with a mono or dialdehyde, a semialdehyde or any chemical containing an aldehyde group, to cross—link antigenic proteins within the sap or the latex product. The cross—linked proteins no longer have the capability to cause an allergic reaction to persons coming into contact with the latex products made by the process of the invention. The cross—linking reaction between the proteins in the latex sap and the aldehyde can take place in the solution used to prepare the final product, or after the final latex product has been formed, or during various intermediate steps of the processes for forming the latex products.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	67	.
M	Armenia	FI	Finland	LT	Lithuania	SI	Slovenia
Г	Austria	FR	France	LU	Luxembourg	SK	Slovakia
U	Australia	GA	Gabon	LV	Latvia	SN	Senegal
Z	Azerbaijan	GB	United Kingdom	MC	Мопасо	SZ	Swaziland
A	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TD	Chad
В	Barbados	GH	Ghana	MG	Madagascar	TG	Togo
E	Belgium	GN	Guinea	МK		TJ	Tajikistan
F	Burkina Faso	GR	Greece	IVEE	The former Yugoslav	TM	Turkmenistan
G	Bulgaria ·	HU	Hungary	ML	Republic of Macedonia Mali	TR	Turkey
J	Benin	IE	Ireland	MN		TT	Trinidad and Tobago
R	Brazil	IL	Israel	MR	Mongolia Mauritania	UA	Ukraine
Y	Belarus	IS	Iceland	MW	Malawi	UG	Uganda
A	Салада	IT	Italy	MX	Mexico	US	United States of Americ
F	Central African Republic	JP	Japan	NE	Niger	UZ	Uzbekistan
G	Congo	KE	Kenya	NL	Netherlands	VN	Viet Nam
H	Switzerland	KG	Kyrgyzstan	NO	Norway	YU	Yugoslavia
1	Côte d'Ivoire	KP	Democratic People's	NZ	New Zealand	zw	Zimbabwe
M	Cameroon		Republic of Korea	PL	Poland		
N	China	KR	Republic of Korea	PT	Portugal		
U	Cuba	KZ	Kazakstan	RO	Romania		
Z	Czech Republic	LC	Saint Lucia	RU			
E	Germany	LI	Liechtenstein	SD	Russian Federation Sudan		
K	Denmark	LK	Sri Lanka	SE			
E	Estonia	LR	Liberia	SG	Sweden Singapore		